EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	("6348589").PN.	USPAT	OR	OFF	2006/03/09 11:08
S1	161	536/25.6	US-PGPUB; USPAT	OR	OFF	2006/03/09 11:08
S2	51	536/25.6 and dinucleotide	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:56
S3	2393	424/45	US-PGPUB; USPAT	OR	OFF	2002/09/06 13:37
S4	12	424/45 and dinucleotide	US-PGPUB; USPAT	OR	OFF	2002/09/06 13:39
S5	84	514/851	US-PGPUB; USPAT	OR	OFF	2002/09/06 13:41
S6	435	514/47	US-PGPUB; USPAT	OR	OFF	2002/09/06 13:41
S 7	48	514/47 and dinucleotide	US-PGPUB; USPAT	OR	OFF	2002/09/06 13:43
S8	262	514/51	US-PGPUB; USPAT	OR	OFF	2002/09/06 13:43
S9	32	514/51 and dinucleotide	US-PGPUB; USPAT	OR	OFF	2002/09/06 13:43
S10	8	(("4855304") or ("5495550") or ("5635160") or ("5681823") or ("5837861") or ("5900407") or ("6159952") or ("6331529")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2002/12/19 10:21
S11	2	09/747777	US-PGPUB; USPAT	OR	OFF	2002/12/19 10:24
S12	1	09/570231	US-PGPUB; USPAT	OR	OFF	2002/12/19 10:24
S13	1	(("9602554") or ("5635160")).PN.	USPAT; USOCR	OR	OFF	2003/08/07 15:06
S14	8	("9602554").PN.	USPAT; USOCR; DERWENT	OR	OFF	2003/08/07 15:12
S15	2	(excipient and osmolarity) and dinucleotide	USPAT	OR	OFF	2003/08/07 15:13
S16	246	excipient and osmolarity	USPAT	OR	OFF	2003/08/07 15:16

3/9/06 11:10:14 AM C:\Documents and Settings\DKhare\My Documents\EAST\Workspaces\10682545.wsp

Page 1

EAST Search History

S17	47	(("(6596725") or ("6331523") or ("5948801") or ("6372753") or ("6124259") or ("6475508") or ("6462071") or ("5767079") or ("6114320") or ("5665769") or ("5722428") or ("5181922") or ("5366474") or ("5596011") or ("6075032") or ("6451763") or ("6573271") or ("6451763") or ("6573271") or ("6384081") or ("6573274") or ("6059828") or ("6126687") or ("6217594") or ("6217594") or ("6217594") or ("6149931") or ("5824685") or ("6149931") or ("6156042") or ("6524330") or ("6162242") or ("6378526") or ("6397849") or ("6540391") or ("6397849") or ("6540391") or ("6696415") or ("5527356") or ("6696415") or ("5286261") or ("6640124") or ("5286261") or ("4299227).pn")). PN.	USPAT; USOCR	OR	OFF	2004/03/12 10:26
S18	47	(("(6596725") or ("6331523") or ("5948801") or ("6372753") or ("6124259") or ("6475508") or ("6462071") or ("5767079") or ("6114320") or ("5665769") or ("5722428") or ("5181922") or ("5366474") or ("5596011") or ("6075032") or ("5423800") or ("5688264") or ("6451763") or ("6573271") or ("6384081") or ("6573271") or ("6384081") or ("6126687") or ("6217594") or ("6217594") or ("6149931") or ("5324685") or ("6149931") or ("61560242") or ("6554330") or ("6162242") or ("65738526") or ("6397849") or ("6540391") or ("6397849") or ("6540391") or ("6397849") or ("6540391") or ("6284245") or ("5527356") or ("6696415") or ("5286261") or ("6640124") or ("6071924") or ("4299227).pn")).	USPAT; USOCR	OR	OFF	2004/07/08 12:53

3/9/06 11:10:14 AM C:\Documents and Settings\DKhare\My Documents\EAST\Workspaces\10682545.wsp

EAST Search History

S19	5045	dinucleotide and composition	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:56
S20	10567	514/12	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:56
S21	191	514/12 and (dinucleotide and composition)	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:57
S22	1254	514/277	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:57
S23	10	514/277 and (dinucleotide and composition)	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:57
S24	1096	424/427	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:57
S25	3	424/427 and (dinucleotide and composition)	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:58
S26	6826	128/898	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:57
S27	15	128/898 and (dinucleotide and composition)	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:58
S28	245	623/4.1	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:58
S29	0	623/4.1 and (dinucleotide and composition)	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:58
S30	1200	606/107	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:58
S31	3	606/107 and (dinucleotide and composition)	US-PGPUB; USPAT	OR	OFF	2004/07/08 12:58
S32	7	(("6555675") or ("6319908") or ("6548658") or ("6596725") or ("6673779") or ("6696425") or ("6348589")) PN	USPAT	OR	OFF	2005/10/14 09:52
S33	2	(("6040297") or ("6458946")).PN.	USPAT	OR	OFF	2005/10/14 11:03
S34	1	("6818629").PN.	USPAT	OR	OFF	2005/10/14 11:03
S35	1	("5248699").PN.	USPAT	OR	OFF	2005/10/14 13:48

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN

RN 211448-85-0 REGISTRY

CN Uridine 5'-(pentahydrogen tetraphosphate), P'''→5'-ester with 2'-deoxycytidine (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Denufosol

FS STEREOSEARCH

MF C18 H27 N5 O21 P4

CI COM

SR CA

LC STN Files: ADISINSIGHT, CA, CAPLUS, IMSPATENTS, IMSRESEARCH, PROUSDDR, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PRP (Properties); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN

RN 14264-46-1 REGISTRY

CN Uridine 5'-(tetrahydrogen triphosphate), tetrasodium salt (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN Sodium UTP

CN Uridine triphosphate sodium salt

FS STEREOSEARCH

MF C9 H15 N2 O15 P3 . 4 Na

LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL

(*File contains numerically searchable property data)

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); USES (Uses)

RL.NP Roles from non-patents: BIOL (Biological study); USES (Uses)

CRN (63-39-8)

Absolute stereochemistry.

•4 Na

- 6 REFERENCES IN FILE CA (1907 TO DATE)
- 6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:348995 CAPLUS

DOCUMENT NUMBER:

142:367712

TITLE:

Pharmaceutical formulation comprising dinucleoside

INVENTOR (S):

polyphosphates and salts thereof Yerxa, Benjamin R.; Peterson, Ward M.; Rideout, Janet

L.; Pendergast, William

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 27 pp., Cont.-in-part of U.S.

Ser. No. 397,795.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

18

PATENT INFORMATION:

PA	PATENT NO.				KIND DATE				AI	PL	ICAT:	DATE					
US	2005	0854	39		A1	_	2005	0421	บร	5 2	004-	9620	16	20041007			
US	5837	861 ⁾			Α		1998	1117	US	5 1	997-	7985	80		1:	9970	210
WO	9834	942			A2		1998		WC				19980206			206	
WO	9834	942			A3		2000	0106									
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									LT, I								
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE, S	ΞG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,
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	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG, Z	ZW,	ΑT,	BE,	CH,	DΕ,	DK,	ES,	FI,
		FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	NL, E	PT,	SE,	BF,	BJ,	CF,	CG,	CI,	CM,
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							2002	0219	US 1998-101395						1:	9980	710
	2001								US	3 2	001-	7747!	52		2	0010	130
US	6596	725 7	L		B2		2003	0722									
US	2003 6818	1869	1,7		A1		2003	1002	US	3 2	003-3	3977	95		2	0030	325
					B2		2004	1116									
PRIORITY	Y APP	LN.	INFO	.:							997-				A2 1	9970:	210
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									US 1998-101395					7	A2 1	9980'	710
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								US 2003-397795					7	A2 2	0030	325	
									บร	3 1	997-7	7974	72	7	A2 19	9970	206

AB The invention provides a method of treating edematous retinal disorders. The method comprises administration of a pharmaceutical formulation comprising a hydrolysis-resistant P2Y receptor agonist to stimulate the removal of pathol. extraneous fluid from the subretinal and retinal spaces and thereby reduce the accumulation of said fluid associated with retinal detachment and retinal edema. The P2Y receptor agonist can be administered with therapeutic and adjuvant agents commonly used to treat edematous retinal disorders. The pharmaceutical formulation useful in this invention comprises a P2Y receptor agonist with enhanced resistance to extracellular hydrolysis, such as dinucleoside polyphosphate compds., or hydrolysis-resistant mononucleoside triphosphate salts. The invention also provides P1-(2'-deoxycytidine 5'-)P4-(uridine 5'-)tetraphosphate, tetra-(alkali metal) salts such as tetrasodium, tetralithium, tetrapotassium, and mixed (tetra-alkali metal) salts. The invention further provides a pharmaceutical formulation comprising a P1-(2'-deoxycytidine 5'-)P4-(uridine 5'-)tetraphosphate, tetra-(alkali metal) salt, in a pharmaceutically acceptable carrier.

ANSWER 2 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:777379 CAPLUS

DOCUMENT NUMBER:

139:286382

TITLE:

Method for the treatment of edematous retinal

disorders

INVENTOR (S):

Peterson, Ward M.; Yerxa, Benjamin R.

PATENT ASSIGNEE(S): Inspire Pharmaceuticals, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S.

Ser. No. 774,752. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

	PATENT NO.														DATE			
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US	2003	1869	17		A1		2003	1002		US	2003-	3977	95		20030325			
US	6818	629			B2		2004	1116										
US	5837	861			Α		1998	1117		US	1997-	7985	08		1	9970	210	
WO	9834	942			A2		1998	0813		WO	1998-	US27	02		1	9980	206	
WO	9834	942			A 3		2000	0106										
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US	6348		-	-	-		•	-		US	1998-	1013	95		1	9980	710	
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				• •							1998-					9980		
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OTHER C	0110.00	<i>(</i>					120	0060		US	2003-	3977	95		A2 2	0030	325	

OTHER SOURCE(S): MARPAT 139:286382

The invention provides method for the treatment of edematous retinal disorders. Method comprises administration of a pharmaceutical formulation comprising a hydrolysis-resistant P2Y receptor agonist to stimulate the removal of pathol. extraneous fluid from the subretinal and retinal spaces and thereby reduce the accumulation of said fluid associated with retinal detachment and retinal edema. The P2Y receptor agonist can be administered with therapeutic and adjuvant agents commonly used to treat edematous retinal disorders. The pharmaceutical formulation useful in this invention comprises a P2Y receptor agonist with enhanced resistance to extracellular hydrolysis, such as dinucleoside polyphosphate compds., or hydrolysis-resistant mononucleoside triphosphates.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:136070 CAPLUS

DOCUMENT NUMBER: 136:151393

TITLE: Preparation of dinucleotides and their use as

modulators of mucociliary clearance and ciliary beat

frequency

INVENTOR(S): Pendergast, William; Yerxa, Benjamin R.; Rideout,

Janet L.; Siddiqi, Suhaib M.

PATENT ASSIGNEE(S): Inspire Pharmaceuticals, Inc., USA

SOURCE: U.S., 15 pp., Cont.-in-part of U.S. 5,900,407.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US	6348	589			В1		2002	0219	1	ווס ז	998-	1013	05		1	9989	710		
	5900				A		-	0504			1997-'		_						
-	5837														_				
					A			1117			.997-				_	.9970			
	9834				A2			0813	1	WO 1	.998-1	JS27	02]	.9980	206		
WO	9834				A3		2000												
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US	2002			·	A1	•	•	0627		US 2	2001-	7451			2	0011	106		
US	6977	246			B2		2005	1220											
	2003	•	17					1002	1	US 2	2003 - 3	3977	95		-	20030	325		
	6818		-		B2		2004		•	00 2	.005 .		, ,		-	.0050	J 23 J		
	2004		85		A1			0422	1	IIS 2	2003-0	58254	45		-	0031	വെള		
	2005	-			A2			0120			2004 - 2		_			0040			
	2005				A1			0421			2004 - 9					0040			
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									Ţ	US 1	.999-3	3977	95		A3]	.9990	917		
									τ	US 2	2001-	7747	52		A2 2	0010	130		
									Ţ	US 2	003-	3977	95		A2 2	0030	325		

OTHER SOURCE(S): MARPAT 136:151393

GI

AB The present invention relates to certain novel dinucleotides I (X = 0, CH2, imido, CF2; B, B1 = independently nucleobase; Z, Z1 = independently OH, N3; Y, Y1 = independently H, OH; Q = (HPO3)m; n = 0-2; m = 0-2; n + m = 0-4) and formulations thereof which are highly selective agonists of the P2Y2 and/or P2Y4 purinergic receptor. They are useful in the treatment of chronic obstructive pulmonary diseases such as chronic bronchitis, PCD, cystic fibrosis, as well as prevention of pneumonia due to immobility. Furthermore, because of their general ability to clear retained mucus secretions and stimulate ciliary beat frequency, the compds. of the present invention are also useful in the treatment of sinusitis, otitis media and nasolacrimal duct obstruction. They are also useful for treatment of dry eye disease and retinal detachment. Thus, P1, P2-di (uridine-5'-)-P2, P3-methylenetetraphosphate was prepared as P2Y2 and/or P2Y4 purinergic receptor (EC50 = $11.1 \mu mol$). REFERENCE COUNT: 93 THERE ARE 93 CITED REFERENCES AVAILABLE FOR THIS

L7 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:851183 CAPLUS

DOCUMENT NUMBER: 136:690

TITLE: Method for retinal degeneration treatment

with purinergic receptor agonists

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

INVENTOR(S): Peterson, Ward M.

PATENT ASSIGNEE(S): Inspire Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
						-										-		
WO	2001	0879	13		A2		2001	1122	1	WO	200	01-1	US15	606		2	0010	510
WO	2001	0879	13		A3		2002	0530										
WO	2001	0879	13		C2		2003	0320										
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							IS,											
							MG,											
							SK,											
							ΑZ,									•	·	•
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							GA,										•	
US	6864	243			B1		2005	0308	Ţ	US	200	00-!	5702	31		2	0000	512
CA	2408	842			AA		2001	1122	(CA	200	1-2	24088	342		2	0010	510
EP	1280	536			A2		2003	0205]	EΡ	200	1-9	93334	13		2	0010	510
							ES,											
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BR	2001	0104	18		Α		2003	0408	I	BR	200	1-1	10418	3		2	0010	510
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US	2005	0097	78		A1		2005	0113	τ	US	200)4 - 9	91608	36		2	0040	810
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OTHER SO	URCE	(S):			MARI	TAS	136:	690										

AB Methods are disclosed for prevention or treatment of retinal degeneration arising from pathophysiol. or phys. conditions. The method involves administration of a pharmaceutical composition comprising a purinergic P2Y receptor ligand, in an amount effective to elevate its extracellular concentration to activate retinal glial and neuronal cell surface P2Y receptors and mount a neuroprotective response. Also disclosed are methods of administration including intravitreal bolus and sustained-release administration, transscleral delivery, topical, and systemic administration. The pharmaceutical composition useful in the invention comprises a P2Y purinergic receptor agonist, which include uridine 5'-di -and triphosphate (UDP, UTP) and their analogs, ADP (ADP) and its analogs, cytidine 5'-di- and triphosphate (CDP, CTP) and their

L7 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:763523 CAPLUS

DOCUMENT NUMBER:

135:298823

analogs, and dinucleoside polyphosphate compds.

TITLE:

Use of P2Y receptor agonist dinucleotide compounds to

stimulate removal of fluid in retinal

detachment and retinal edema

INVENTOR(S): Peterson, Ward M.; Yerxa, Benjamin R.

PATENT ASSIGNEE(S): Peterson, Ward M., USA

SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S.

5,837,861. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2001031743 US 6596725	A1 B2	20011018 20030722	US 2001-774752	20010130
US 5837861	A	19981117	US 1997-798508	19970210
ZA 9801073	A .	19990219	ZA 1998-1073	19980210
US 2002103158	A1	20020801	US 2001-817017	20010323
US 6555675	B2	20030429		

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CA 2436429
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                                           CA 2002-2436429
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    WO 2002060454
                         A2
                                20020808
                                            WO 2002-US3934
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    WO 2002060454
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                                                                   20041007
                                            US 1997-798508
PRIORITY APPLN. INFO.:
                                                                A2 19970210
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                                                                A2 19980710
                                            US 1999-397795
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                                                                A 20010323
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                                                               A2 20030325
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OTHER SOURCE(S): MARPAT 135:298823

The invention provides a method of treating edematous retinal disorders. The method comprises administration of a P2Y receptor agonist to stimulate the removal of pathol. extraneous fluid from the subretinal and retinal spaces and thereby reduce the accumulation of said fluid associated with retinal detachment and retinal edema. The P2Y receptor agonist may be administered with therapeutic and adjuvant agents commonly used to treat edematous retinal disorders. The pharmaceutical composition useful in this invention comprises a P2Y receptor agonist with enhanced resistance to extracellular hydrolysis, such as dinucleoside polyphosphate compds.

ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:335023 CAPLUS

DOCUMENT NUMBER: 132:339428

TITLE: Defined serum-free medical solution for ophthalmology

INVENTOR (S): Skelnik, Debra A.

PATENT ASSIGNEE(S): Bausch and Lomb Surgical, Inc., USA

SOURCE: Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	TENT NO.	KIND DA	TE A	PPLICATION NO.	DATE
			000517 E	P 1999-308702	19991102
	R: AT, BE, CH, IE, SI, LT,			GR, IT, LI, LU, N	IL, SE, MC, PT,
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JΡ	2000198701	A2 20	000718 ј	P 1999-313063	19991102
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ES	2217700	T3 20	041101 E	S 1999-308702	19991102

PRIORITY APPLN. INFO.: US 1998-186580 A 19981105

The title solution contains one or more cell nutrient supplements and a growth factor which maintains and enhances the preservation of eye tissues, including human corneal, retinal, and corneal epithelial tissues at low to physiol. temperature (2-38°). This solution is composed of a defined aqueous nutrient and electrolyte solution, supplemented with glycosaminoglycans, deturgescent agents, energy sources, buffer systems, antioxidants, membrane stabilizers, antibiotics, antimycotics, ATP or energy precursors, nutrient cell supplements, nonessential amino acids, trace minerals, trace elements, and growth factors.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1998:550430 CAPLUS

DOCUMENT NUMBER: 129:175919

TITLE: Preparation of dinucleotides and their use as

modulators of mucociliary clearance and ciliary beat

frequency

INVENTOR(S): Pendergast, William; Yerxa, Benjamin R.; Rideout,

Janet L.; Siddiqi, Suhaib M.

PATENT ASSIGNEE(S): Inspire Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

	PATENT NO.																		
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		DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	GV	Ν,	HU,	ID,	IL,	IS,	JР	, KE,	KG,	
		KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	Ll	J,	LV,	MD,	MG,	MK,	MN	, MW,	MX,	
		NO,	NZ,	РЬ,	PT,	RO,	RU,	SD,	SE,	SC	3,	SI,	SK,	SL,	TJ,	TM	TR,	TT,	
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	R:	AT, IE,	BE, FI	CH,	DE,	DK,	ES,	FR,	GB,	GF	₹,	IT,	LI,	LU,	NL,	SE	MC,	PT,	
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PRIORITY	APPI	LN.]	INFO.	:									9747	12	7	42 1	9970	206	
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US 1998-101840 A2 19980717 US 1999-397795 A3 19990917 US 2001-774752 A2 20010130 US 2001-7451 A2 20011106 US 2003-397795 A2 20030325

OTHER SOURCE(S):

MARPAT 129:175919

The present invention relates to certain novel dinucleotides I (X = 0, CH2, imido, CF2; B, B1 = independently nucleobase; Z, Z1 = independently OH, N3; Y, Y1 = independently H, OH; Q = (HPO3)m; n = 0-2; m = 0-2; n + m = 0-4) and formulations thereof which are highly selective agonists of the P2Y2 and/or P2Y4 purinergic receptor. They are useful in the treatment of chronic obstructive pulmonary diseases such as chronic bronchitis, PCD, cystic fibrosis, as well as prevention of pneumonia due to immobility. Furthermore, because of their general ability to clear retained mucus secretions and stimulate ciliary beat frequency, the compds. of the present invention are also useful in the treatment of sinusitis, otitis media and nasolacrimal duct obstruction. They are also useful for treatment of dry eye disease and retinal detachment. Thus, P1, P2-di (uridine-5'-)-P2, P3-methylenetetraphosphate was prepared as P2Y2 and/or P2Y4 purinergic receptor (EC50 = 11.1 μ mol).